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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------------|---------------------|---------------------|
| 10/729,609 | 12/05/2003 | Thomas McWaid | TNCR.169US2 | 2888 |
| 36257 | 7590 | 05/05/2004 | | EXAMINER |
| | | PARSONS HSUE & DE RUNTZ LLP | | LARKIN, DANIEL SEAN |
| | | 655 MONTGOMERY STREET | | |
| | | SUITE 1800 | ART UNIT | PAPER NUMBER |
| | | SAN FRANCISCO, CA 94111 | | 2856 |

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------------|------------------|----|
| Office Action Summary | Application No. | Applicant(s) | GA |
| | 10/729,609 | MCWAID ET AL. | |
| | Examiner Daniel S. Larkin | Art Unit 2856 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 December 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 05 December 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Acknowledgement is made of Applicants' preliminary amendment filed 5 December 2003.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Reference numeral -- 20' -- does not appear in the drawing figures as suggested by the specification on page 15, page line 16.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

4. The disclosure is objected to because of the following informalities:

Page 1, first paragraph, text line 2: The phrase -- now abandoned, -- should be inserted after the date "December 26, 2002".

Page 1, first paragraph, text line 2: The phrase -- which is a continuation of application Serial No. 09/313,962, filed May 18, 1999, now U.S. Patent No. 6,520,005, -- should be inserted prior to the phrase "which is a continuation-in-part...". Otherwise there appears to be no copendency between application Serial No. 10/330,901 and Serial No. 08/730,641.

Page 1, first paragraph, text line 3: The phrase -- now U.S. Patent No. 5,948,972, -- should be inserted after the date "October 11, 1996".

Page 1, first paragraph, text line 4: The phrase -- now abandoned, -- should be inserted after the date "February 9, 1996".

Page 1, first paragraph, text lines 4-6: The sentence "This application also claims the benefit of application Serial No. 08/362,818, filed December 22, 1994." should be replaced with the phrase -- , which is a continuation-in-part of application Serial No. 08/362,818, filed December 22, 1994, now U.S. Patent No. 5,705,741 -- and inserted after the date "February 9, 1996".

Page 11, page line 20: Numerals "1" and "50" should be corrected to read -- one -- and -- fifty --, respectively.

Page 15, page line 28: Numerals "3" and "25" should be corrected to read -- three -- and -- twenty-five --, respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,497,656 (Kado et al.) in view of Dimensional Metrology with Scanning Probe Microscopes (Griffith et al.)

With respect to the limitations of claim 1, the reference to Kado et al. discloses a method of measuring a surface profile using an atomic force microscope comprising the steps of (a) positioning a probing tip (12) above one location of a sample surface; (b) moving one of the cantilever and the sample surface towards one another by a constant given distance so that the probing tip is brought into contact with the sample surface, the constant given distance being determined in advance so as to be greater than a maximum value of height variations of the sample surface within a range thereof to be measured; (c) measuring a height of the sample surface with the probing tip held in contact with the sample surface; (d) imaging the height measured at set (c); (e) moving the cantilever and the sample surface from each other by the given distance so that the probing tip is spaced apart from the sample surface; (f) moving the cantilever and the sample surface relative to the other so that the probing tip is positioned above a next adjacent location of the sample surface spaced apart for the one location; (g) repeating

the steps (b) through (f) at a plurality of succeeding locations of the sample surface so as to image the height variations of the sample surface (col. 2, lines 42-61 and claim 1). The reference to Kado et al. fails to disclose a profiler having an arm rotatable about a pivot. The reference to Griffith et al. discloses a scanning probe microscope having a rocking beam force sensor comprising a cantilever and probe supported by a piezoelectric tube scanner about a pivot (Figure 3). Providing a profiler with an arm rotatable around a pivot would have been obvious to one of ordinary skill in the art as a means of allowing an operator greater control over the scanning process by effectively shortening the cantilever which can be more easily controlled.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claim 1 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,520,005. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the claim limitations of the application are recited in the patented claim. The patented claim further expressly recites that the sensing tip is affixed to the arm, thus making the patented claim narrower than claim 1 of the application.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Larkin whose telephone number is 571-272-2198. The examiner can normally be reached on 8:00 AM - 5:00 PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Larkin
AU 2856
03 May 2004



DANIEL S. LARKIN
PRIMARY EXAMINER